

ABSTRACT

A combined mobile container inspection system with low target relates to the field of radiation scan imaging detection technology. When the system is used, the rotatable platform on the chassis rotates with 90 deg. The gantry mounting consisting of a parallelogram support, a horizontal cross arm and a vertical erect arm crosses over the container being detected, and moves parallel according to the signal emitted from the remote control device. The sliding platform on the back end of the rotatable platform moves down to lower the radiation target emitted from the radiation source, the corrector and the collimator. The sector-shaped X-ray beam emitted from the radiation source penetrating through the container being inspected at low position is detected by the detectors mounted in the horizontal cross arm and the vertical erect arm, so as to produce electric-signals and sends the thereof to the image acquisition module in the device cabin, and the electric-signals are transmitted to the operation/inspection device at last. The result are displayed on the remote control computer screen compared with the available technology, the present invention has the features of wide scan range, easy install, convenience in movement, high efficiency, low cost, safety, and high quality image.